## **ABSTRACT OF THE DISCLOSURE**

The present invention provides a motor signature measuring system comprising three current transformers which are placed around the power cables leading to the high voltage motor, an E-Plug module connected to the current transformers and located in a motor control case to reduce the motor voltage from 600V RMS to 5V RMS, jack connectors for connecting the 5V output of the module to a connector mounted through the door of the motor control enclosure, and a cable connector for connecting the door connector to a monitoring system conducting the motor signature testing operations.